(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 11 August 2005 (11.08.2005)

PCT

(10) International Publication Number WO 2005/073416 A1

- (51) International Patent Classification7: C22B 3/40, 23/00
- (21) International Application Number:

PCT/AU2005/000099

- (22) International Filing Date: 28 January 2005 (28.01.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2004900457 28 January 2004 (28.01.2004) AU 2004904166 27 July 2004 (27.07.2004) AU 2004906241 29 October 2004 (29.10.2004) AU

- (71) Applicant (for all designated States except US): COM-MONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION [AU/AU]; Limestone Avenue, Campbell, Australian Capital Territory 2612 (AU).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHENG, Chu, Yong [AU/AU]; 91 Bolderwood Drive, South Lake, Western Australia 6164 (AU). URBANI, Mark, Daniel [AU/AU]; 17 Merlin Way, Wattle Grove, Western Australia 6107 (AU).

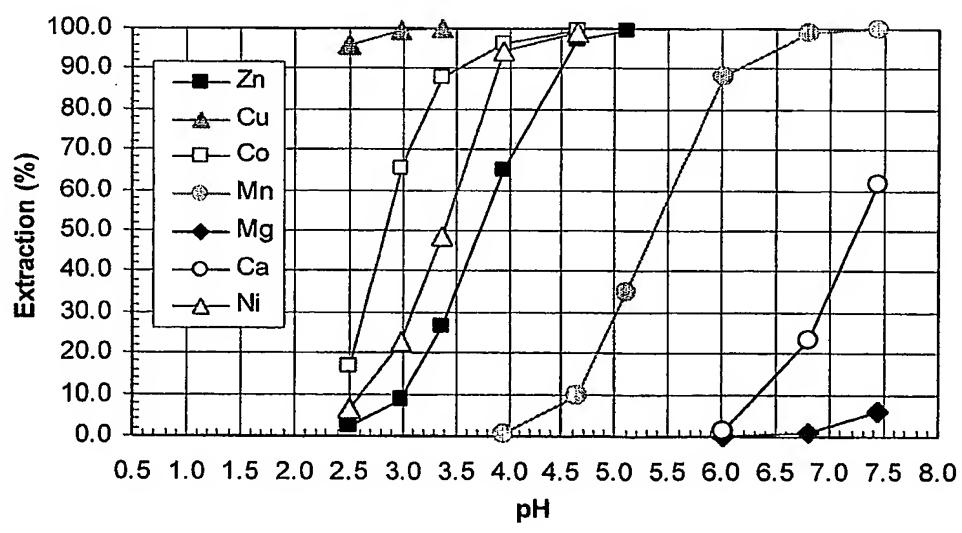
- (74) Agent: GRIFFITH HACK; 509 St Kilda Road, Melbourne, Victoria 3004 (AU).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SOLVENT EXTRACTION PROCESS FOR SEPARATING COBALT AND/OR NICKEL FROM IMPURITIES IN LEACH SOLUTIONS.



(57) Abstract: A process for the separation of nickel, cobalt or both from impurity elements selected from one or more of calcium, magnesium, manganese and chloride contained in a leach solution, the process comprising the step of subjecting the leach solution to solvent extraction using a carboxylic acid (such as Versatic 10), a hydroxyoxime such as LIX 63, a kinetic accelerator such as TBP, and optionally a stabilizer.

